

DIA
Submission**SECRET**

3.0 The Modular Architecture for Exchange of Intelligence (MAXI) is an Air Force/DIA sponsored Automated Message Handling System (AMHS) which supports message traffic preparation, storage, retrieval and review within the Intelligence Community. MAXI supports both SCI and non-SCI sites, but not simultaneously in the same machine. The MAXI is accredited under DIAM 50-4 as a system high system and under DOD C-5030.58-M as a consolidated DSSCS/GENSER AMPE, and as such has some characteristics of a Mandatory access application. The accreditation authority for MAXI is the Director, DIA. The hardware/software base for MAXI is the AN/GYQ-21(V) (PDP-11) hardware and the IAS operating system from which command language and utility functions have been stripped and several significant functions have been added. MAXI is deployed at 16 sites worldwide and has been adopted as the DODIIS Standard AMHS. On the average there are 10 terminals per installation.

3.1 Deficiencies of MAXI against the Minimum Safeguards are:

- o Exportation to multilevel devices
- o Labeling
- o Audit Trail
- o Discretionary access control
- o Identification and authentication
- o System Security Plan
- o Configuration Management
- o Annual Accreditation

3.2 Safeguards

3.2.1 Quick Fix (Hardware/software)

Improvement of exportation to multilevel devices, discretionary access controls, audit trail, identification and authentication, and labeling will require an investment in hardware and software features to be added to the MAXI. It is estimated that these features could be added with 13 man years of development effort plus implementation costs for each system.

Cost Estimate: 1600K

3.2.2 Development and maintenance of a security plan and enhanced Configuration Management will require increased technical support of three man years.

Cost Estimate: 400K

3.2.3 Annual Accreditation of all MAXI sites will require 7 man months of DIA and contract support including travel, housing, and time.

Cost Estimate: 100K

DIA review completed.

SECRET

SECRET

3.2.4 Enhancement of configuration will require one man year of technical support.

Cost Estimate: 150K

3.3 Transition Planning to focus the MAXI toward incorporation of Trusted Computer System Technology, at the system high mode, will require 2 man years of technical support by a Trusted Computer Systems Expert.

Cost Estimate: 500K

3.4 Analysis, additional development, documentation and testing required to integrate quick fixes with transition planning:

Analysis:	200K
Testing:	100K
Documentation of quick fixes: 40% of 1600K =	640K
New development: 25% of 2250K =	565K
Documentation of new developments: 40% of 565K =	225K

Cost Estimate: 1730K

3.5 Cost Estimate Summary:

Quick Fixes:	2250K
Transition:	500K
Analysis:	1730K

	\$ 4480K

— 2600

1880

SECRET